

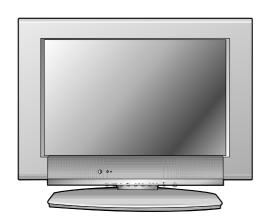
LCD TV SERVICE MANUAL

CHASSIS: ML-027C

MODEL: RU-17LZ22

CAUTION

BEFORE SERVICING THE CHASSIS, READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by Δ in the Schematic Diagram and Replacement Parts List.

It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.

Do not modify the original design without permission of manufacturer.

General Guidance

An **Isolation Transformer should always be used** during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and it's components from being damaged by accidental shorts of the circuitary that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube**. Do not lift the Picture tube by it's Neck.

Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

Leakage Current Cold Check(Antenna Cold Check)

With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on positioin, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.

If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1M Ω and 5.2M Ω .

When the exposed metal has no return path to the chassis the reading must be infinite.

An other abnormality exists that must be corrected before the receiver is returned to the customer.

Leakage Current Hot Check (See below Figure)

Plug the AC cord directly into the AC outlet.

Do not use a line Isolation Transformer during this check.

Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.

Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each esposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which is corresponds to 0.5mA.

In case any measurement is out of the limits sepcified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

Leakage Current Hot Check circuit

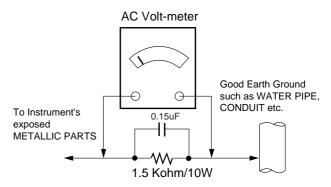


TABLE OF CONTENTS

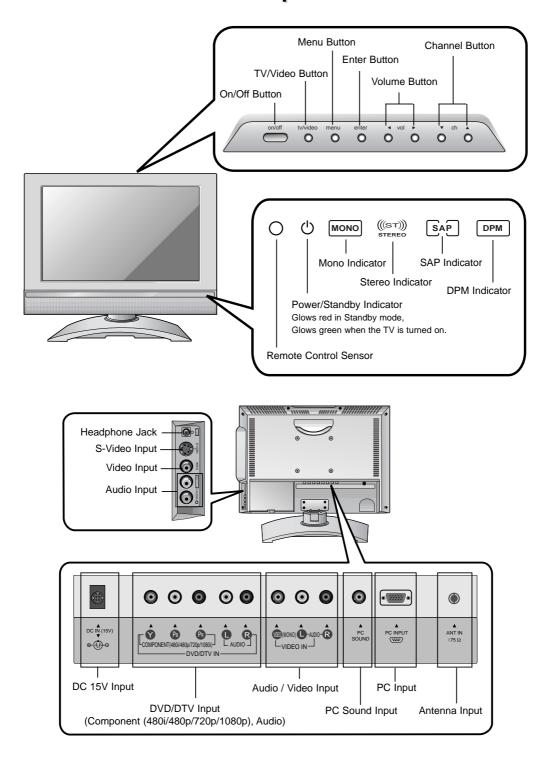
SPECIFICATIONS
DESCRIPTION OF CONTROLS
ADJUSTMENT INSTRUCTIONS7
TROUBLESHOOTING10
PRINTED CIRCUIT BOARD11
BLOCK DIAGRAM14
EXPLODED VIEW16
EXPLODED VIEW PARTS LIST17
REPLACEMENT PARTS LIST18
SCHEMATIC DIAGRAM

SPECIFICATIONS

MODEL	RU-17LZ20/22				
Width (inches)	18.6				
Height (inches)	15.7				
Depth (inches)	7.4				
Weight (pounds)	15.4				
Power Requirement	DC15V/4.5A				
Television System	NTSC				
Television Channel	VHF : 2 ~ 13, UHF : 14 ~ 69, Cable : 01 ~ 125				
Television Screen	LCD Panel				
Power Consumption	See the back of the set				
External Antenna Impedance	75 Ω				
Audio Output	5 W + 5 W				
Adapter (DC Power)	In: AC 100-240V ~ 1.6A-0.7A, 50/60Hz Out: DC 15V, 4.5A * For use only with Model No. SAD7015SE AC Adapter, manufactured by H & E CO., LTD.				

DESCRIPTION OF CONTROLS

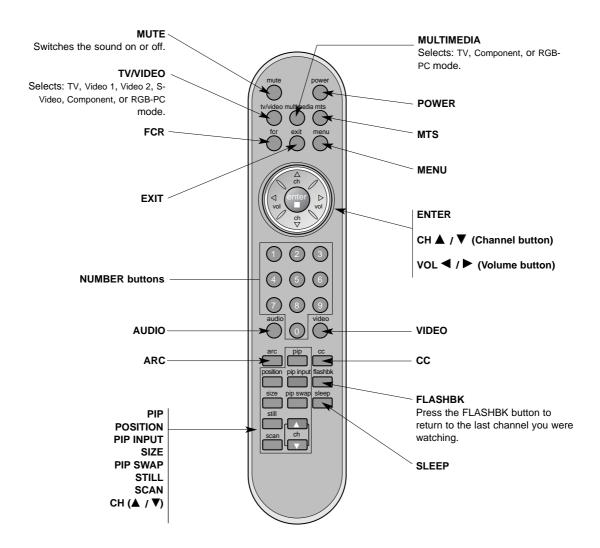
Controls & Connection Options



DESCRIPTION OF CONTROLS

Remote Control Key Functions

- When using the remote control, aim it at the remote control sensor on the TV.



ADJUSTMENT INSTRUCTIONS

1. Application Object

This instruction is for the application to the LCD TV.

2. Notes

- (1) This set uses an adapter, so connect the adapter and the set correctly before adjustment.
- (2) Adjustments must be performed in the correct sequence.
- (3) Adjustments must be performed in an environment of $25\pm5^{\circ}\text{C}$ (68-85 degrees F) of temperature and $65\pm10\%$ of relative humidity.
- (4) The input voltage of the receiver must keep 100~240V, 50/60Hz in adjusting.
- (5) The set must be operated for 15 minutes prior to adjustment.
- * 'Heat Run' must be performed with the full white signal or TV noise signal.

3. PC Input Mode Adjustment

3-1. Required Test Equipment

- (1) A pattern generator; Gray pattern of 16 tones with angle outline in the quadrilateral (MSPG-925LTH)
- (2) An adjustment Remote.

3-2. Preparation for Adjustment

- Perform 'Heat Run' for more than 15 minutes in white pattern.
- (2) Connect the signal of pattern generator with LCD TV.

3-3. Auto Gray Adjustment

- Apply the gray signal XGA(1024X768) 16 tones from a signal generatror.
- (2) In Service menu mode, adjust the Auto gray from 0 to 1 by using Vol(+) button.

ADJUSTMENT INSTRUCTIONS

4. Position Adjustment

Mode	VGA-60	VGA-67	VGA-75	VGA-85	SVGA-56	SVGA-60	SVGA-72	SVGA-75	SVGA-
H_Display	640	640	640	640	800	800	800	800	85800
V_Display	480	480	480	480	600	600	600	600	600
V_Frequency	60	67	75	82	56	60	72	75	85
H_Total	800	864	840	832	1024	1056	1040	1056	1048
H_Blanking	160	224	200	192	224	256	240	256	248
H_Sync	96	64	64	56	72	128	120	80	64
H_Polarity	NEG.	NEG.	NEG	NEG	POS	POS	POS	POS	POS
H_Vp	48	96	120	80	128	88	64	160	152
H_Fp	16	64	16	56	24	40	56	16	32
H-Freq[KHz]	31.469	35.0	37.5	43.269	35.156	37.879	48.077	46.875	53.674
/Clk[MHz]	25.175	30.24	31.5	36.0	36.0	40.0	50.0	49.5	56.25
V_Total	525	525	500	509	62.5	628	666	625	631
V_Blanking	45	45	20	29	25	28	66	25	31
V_Sync	2	3	3	3	2	4	6	3	3
V_Polarity	NEG	NEG	NEG	NEG	POS	POS	POS	POS	POS
V_Bp	33	39	16	25	22	23	23	21	27
V_Fp	10	3	1	1	1	1	37	1	1
	I	1	I	1	1	I	I	I	I

Mode	XGA-60	XGA-70	XGA-75	XGA-85	WXGA-50	WXGA-60
H_Display	1024	1024	1024	1024	1280	1280
V_Display	768	768	768	768	768	768
V_Frequency	60	70	75	82	50	60
H_Total	1344	1328	1312	1376	1648	1680
H_Blanking	320	304	288	352	368	400
H_Sync	136	136	96	96	128	136
H_Polarity	NEG	NEG	POS	POS	NEG	NEG
H_Vp	136	144	176	208	184	200
H_Fp	160	24	16	48	56	64
H-Freq[KHz]	48.363	56.476	60.023	68.677	39.518	47.693
/Clk[MHz]	65.0	75.0	78.75	84.997	65.125	80.125
V_Total	806	806	800	808	791	795
V_Blanking	38	38	32	40	23	27
V_Sync	6	6	3	3	7	7
V_Polarity	NEG	NEG	POS	POS	POS	POS
V_Bp	29	29	28	36	15	19
V_Fp	3	3	1	1	1	1

ADJUSTMENT INSTRUCTIONS

5. EDID (The Extended Display Identification Data)

EDID Table

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	FF	FF	FF	FF	FF	FF	00	30	E5	D7	ЗА	01	00	00	00
10	00	0B	01	01	78	1F	17	70	E8	C3	A0	А3	54	4C	97	24
20	14	50	54	BF	E8	80	31	59	3B	D9	45	59	61	59	71	59
30	81	40	81	80	01	01	10	0E	01	01	01	01	01	01	01	01
40	01	01	01	01	01	01	01	01	F9	15	01	01	01	01	01	01
50	01	01	01	01	01	01	01	01	01	01	64	19	00	40	41	00
60	26	30	18	88	36	00	0E	C3	10	00	00	1E	00	00	00	FD
70	00	32	55	1E	46	0D	00	0A	20	20	20	20	20	20	00	C8

TROUBLESHOOTING

1. General Features

No.	Symptom	Cause	Check Point
1	No screen	Input error of inverter connector	Bend the pin legs of P1 connector -> recheck them Check and repair F804.
		P704 connector slipping out	Check and fix P704 connector Check and fix the components at P704 LCD module and at main board. Check Pin21.
		Cracked components and soldering at tuner board	Check and repair tuner board and main board
2	Dark screen	Defective LCD lamp Defective inverter Input error for inverter	Replace the LCD lamp Replace the inverter Check the connector input.

2. PC Mode

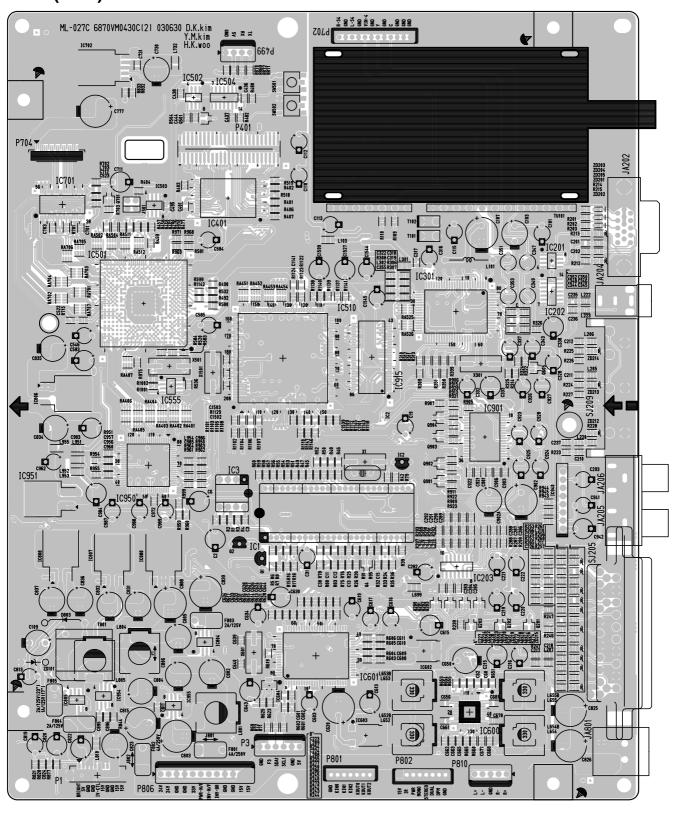
No.	Symptom	Cause	Check Point
1	Screen noise	Clock or phase being not able to be adjusted.	Resettig is needed according to the video card of each PC. Horizontal noise : adjust phase until no horizontal noise occurres. Vertical noise : adjust clock in menu until no vertical noise occurres.
2	Screen position error	Screen position error horizontally or vertically	Activate the Auto Configure in the Menu. Adjust horizontal and vertical position until the screen displayes normally.
3	Color beat noise	Soldering D-SUB Jack of JA202 and IC202.	Recheck and repair JA202,IC202

3. TV and external input

No.	Symptom	Cause	Check Point
1	No sound - Speaker - Earphone	Defective Reset IC of IC604. Defective MSP3411 of IC601. Defective B+(8V,5V) of IC603.	1) Check volume and speaker Sound comes out only when being inputted into Audio L/R. 2) Check after replacing IC604. 3) Replace IC601. 4) Check and replace B+ of IC603.
2	Video color beat noise	Earphone shield case being touched.	Check the mould of shield and SJ209, Replace shield case.
		Soldering IC301 and IC510.	Re-soldering

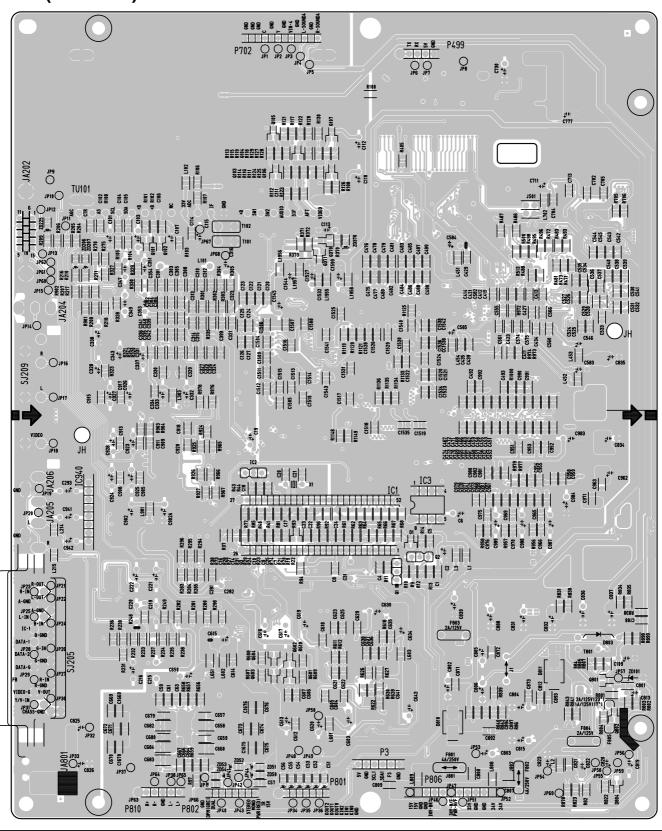
PRINTED CIRCUIT BOARD

MAIN(TOP)



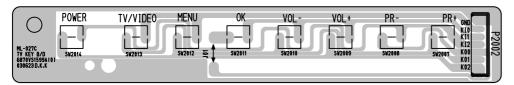
PRINTED CIRCUIT BOARD

MAIN(BOTTOM)

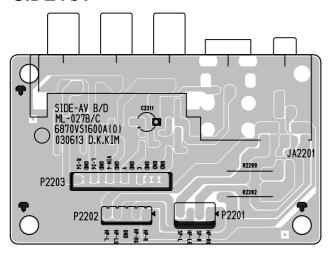


PRINTED CIRCUIT BOARD

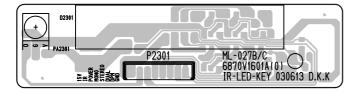
CONTROL



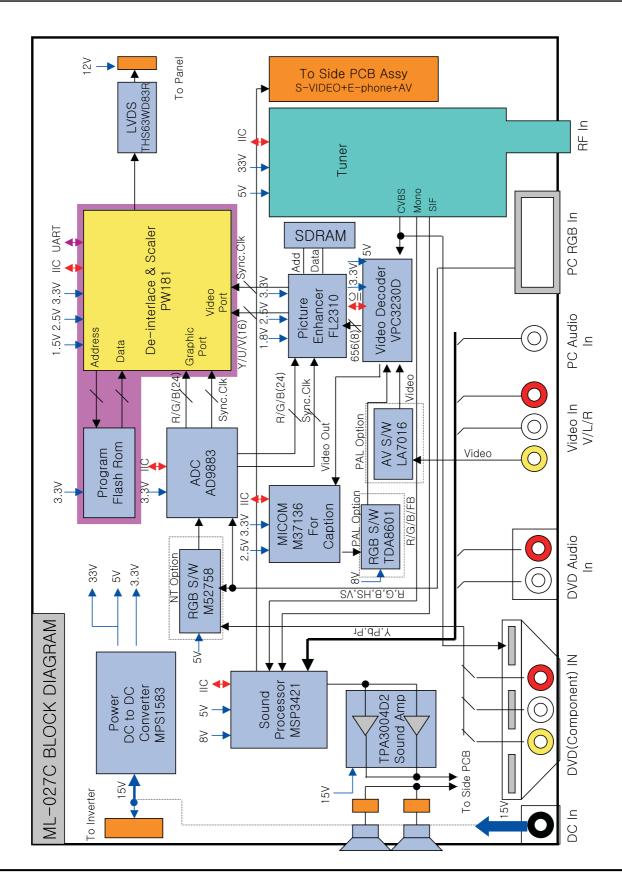
SIDE A/V



LED ASSY

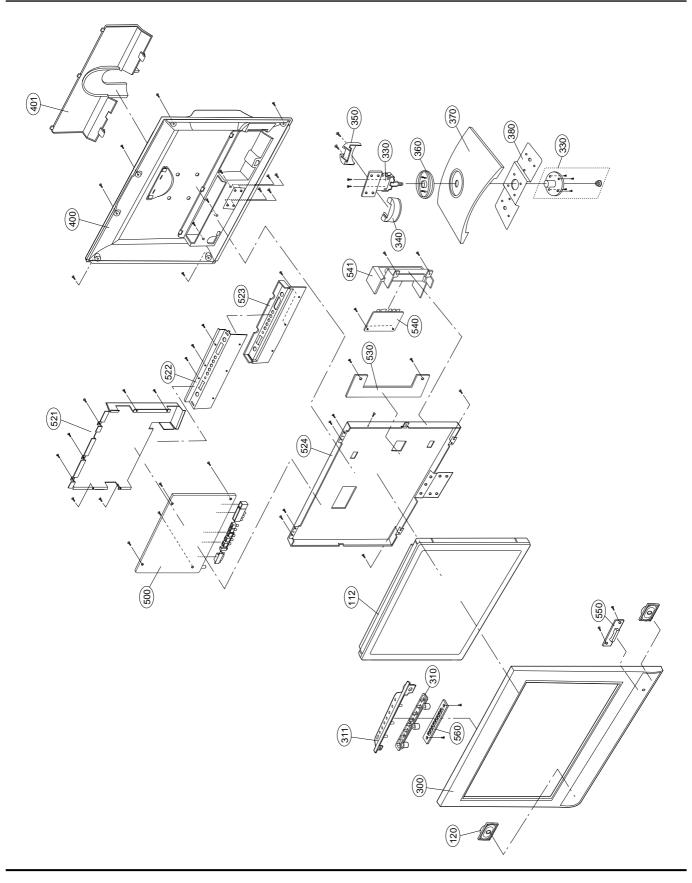


BLOCK DIAGRAM



NOTES

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

No.	PART NO.	DESCRIPTION
112	6306V17001A	LCD MODULE,LC171W03-A4 LG PHILPS TFT COLOR TFT LCD MODULE
120	6400GKTX01A	SPEAKER,FULLRANGE F1527C-6428 (GENERAL) 80HM 7/12W 83DB
300	3091V00535L	CABINET ASSEMBLY,RU-17LZ22 STEREO ML027C FOR CANADA
	3091V00535H	CABINET ASSEMBLY,RU-17LZ22.AAPLKZ
310	5020V00798C	BUTTON,CONTROL RU-17LZ22 ABS, HF-380 8KEY
311	4810V00836G	BRACKET,CONTROL RU-17LZ22 ML027C HIPS 40AF
330	4950V00157A	METAL,STAND NON HINGE ASSY_15LA60
340	4810V00777D	BRACKET,STAND RU-15LA61 ML012C HIPS 60HR FRONT
350	4810V00778D	BRACKET,STAND RU-15LA61 ML012C HIPS 60HR REAR
360	4810V00776C	BRACKET,DECO RU-15LA61 ML012C ABS, HF-380
370	4810V00779C	BRACKET,STAND RU-15LA61 ML012C ABS, HF-380 BASE
380	4950V00135A	METAL,STAND NON BASE, 15LA60
400	3809V00371K	BACK COVER ASSEMBLY,RU-17LZ22 NON
401	3550V00335B	COVER,REAR AV RU-17LZ22 ABS, HF-380
500	3141VMNQ35A	CHASSIS ASSEMBLY,MAIN ML027C
521	4950V00168A	METAL,SHIELD NON NON
522	4950V00151B	METAL,SHIELD ET .
523	3500V00067F	BOARD,AV RU-17LZ22 ML027C .
524	4950V00167A	METAL,FRAME NON NON
530	6633VA0003R	INVERTER ASSEMBLY,15V NON ECT 6LAMP CIU11-K004
540	6871VSMW58A	PCB ASSEMBLY,SUB ML027C SIDE A/V
541	4810V00838G	BRACKET,SIDE AV RU-17LZ22 ML027C HIPS 40AF
550	6871VSMW59A	PCB ASSEMBLY,SUB WINDO ML027C INDEX ASSY
560	6871VSMW57F	PCB ASSEMBLY,SUB CONT ML027C RU-17LZ22

For Capacitors & Resistors, the 2nd and 3rd digits in the P/No. designate;

CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

RUN DATE: 2003.8.12

LOCA. NO	PART NO	DESCRIPTION					
		IC					
IC1	0IZZVC0070A	M37136EFSP DIP 52P					
IC2	0IFA754207A	KA75420ZTA 3P,TO92 TP 4.2V					
IC201	0IAL242110A	AT24C2110SI2.5 8P,SOP TP 1K					
IC202	0IMCRFA022A	74F14SC 14P SCHMITT TRIGGER IC					
IC3	0IAL241610B	AT24C16A10PI2.7 8PIN					
IC301	0IIT323000E	VPC3230D C5 80P VIDEO PROCESSOR					
IC401	0IIN298003A	COPY TE28F800B3TA90 48TSOP BK 8M					
IC501	0IMCRPW001B	PW181(133MHZ) 352PBGA					
IC502	0IMCRTI020A	TLC7733ID 8P SOP R/TP DTYPE 3.3V					
IC503	0IMCRAL006A	AT24C16AN10SI2.7 8P					
IC504	0IMCRTI002A	SN74HCT32D 16P					
IC510	0IMCRGN001B	FLI2310BC 208P DIGITAL VIDEO					
IC555	0IMCRPU001A	P2781A08SR 8 PIN R/TP EMI REDUCTION					
IC600	0IMCRTI022D	TPA3004D2 48P 9WSTEREO AUDIO AMP					
IC601	0IMCRMN007A	MSP3421G QA B8 V3 80P VIRTUAL DOLBY					
IC603	0IMCRFA008A	KA78M05RTM 2P DPAK					
IC604	0IKE704200J	KIA7042AF SOT89 TP 4.2V					
IC701	0IMCRTH001A	THC63LVDM83R 56P TRANSMITTER IC					
IC702	0IMCRNS007B	LM2941S 5P TO263 R/TP 12V					
IC806	0IMCRNS007D	LMS1587 CS 1.5V 3P TO263					
IC807	0IMCRNS007C	LMS1587CSADJ 3P TO263 R/TP 1.5V					
IC808	0IMCRNS007C	LMS1587CSADJ 3P TO263 R/TP 1.5V					
IC888	0IMCRNS007A	LM2940S 8V 3P TO263					
IC901	0IMCRMI006A	M52758FP 36PIN, R/TP PLL IC					
IC915	0IMMRHY033A	HY57V643220C(L)T6 86P 64M					
IC950	0IMCRAD002A	AD9883A 80P DIGITAL BOARD					
IC951	0IMCRNS007E	LMS1587CS3.3 3P TO263 R/TP 3.3V					
IC954	0IMCRMZ001A	MP1583DN 8P DCDC CONVERTER					
IC955	0IMCRMZ001A	MP1583DN 8P DCDC CONVERTER					
	Т	RANSISTOR					
IC804	0TFVI80005A	SI4963DY R/TP SO8 20V 6.2A					
IC805	0TF492509AA	SI4925DY 30V 6.1A SO8					
Q104	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q107	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q201	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q202	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q203	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q2301	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q2302	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q2303	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q2304	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q2305	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q2306	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q2307	0TR387500AA	CHIP 2SC3875S(ALY) KEC					
Q2308	0TR387500AA	CHIP 2SC3875S(ALY) KEC					

LOCA. NO	PART NO	DESCRIPTION							
Q3	0TR387500AA	CHIP 2SC3875S(ALY) KEC							
Q370	0TR387500AA	CHIP 2SC3875S(ALY) KEC							
Q371	0TR387500AA	CHIP 2SC3875S(ALY) KEC							
Q4	0TR387500AA	CHIP 2SC3875S(ALY) KEC							
Q605	0TR387500AA	CHIP 2SC3875S(ALY) KEC							
Q606	0TR150400BA	CHIP 2SA1504S(ASY) KEC							
Q701	0TR387500AA	CHIP 2SC3875S(ALY) KEC							
Q801	0TR387500AA	CHIP 2SC3875S(ALY) KEC							
Q802	0TR387500AA	CHIP 2SC3875S(ALY) KEC							
	DIODE								
C51	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
C52	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
C53	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
C54	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
C55	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
C56	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
D1	0DD181009AB	KDS181 85V 300MA							
D803	0DD100009AM	EU1ZV(1) TP SANKEN							
D804	0DD181009AB	KDS181 85V 300MA							
D810	0DR340009AA	MBRS340 40V 3A 80A 2MA							
D811	0DR340009AA	MBRS340 40V 3A 80A 2MA							
ZD101	0DZ330009BA	ZENERS,HZT33							
ZD201	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD202	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD203	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD204	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD205	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD206	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD207	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD212	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD213	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD214	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD215	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD216	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD225	0DZRM00178A	ZENERS,UDZS TE17 5.1B							
ZD370	0DZRM00248A	ZENERS,RLZ8.2BTE11							
		CAPACITOR							
C107	0CE108DD618	1000UF STD 10V M							
C109	0CE106DK618	10UF STD 50V M							
C112	0CE476DF618	47UF STD 16V M							
C113	0CE107DF618	100UF STD 16V M							
C1527	0CE107DF618	100UF STD 16V M							
C1532	0CE107DF618	100UF STD 16V M							
C1544	0CE476DF618	47UF STD 16V M							
C1545	0CE107DD618	100UF STD 10V M							
C1599	0CE107DD618	100UF STD 10V M							

LOCA. NO	PART NO	DESCRIPTION	LOCA. NO	PART NO	DESCRIPTION
C19	0CE106DF618	10UF STD 16V M	C634	0CE107DF618	100UF STD 16V M
C2	0CE107DF618	100UF STD 16V M	C643	0CE476DK618	47UF STD 50V M
C2	0CE687DD618	680UF STD 10V 20%	C644	0CK224DF56A	220000PF 2012 16V 10%
C216	0CE106DF618	10UF STD 16V M	C645	0CK224DF56A	220000PF 2012 16V 10%
C219	0CE106DF618	10UF STD 16V M	C650	0CE227DH618	220UF STD 25V M
C220	0CE106DF618	10UF STD 16V M	C658	0CN475FH67A	4.7UF 3225 25V 20%
C2201	0CK105DF64A	1UF 2012 16V 20%	C660	0CN475FH67A	4.7UF 3225 25V 20%
C2202	0CK105DF64A	1UF 2012 16V 20%	C662	0CK105DF64A	1UF 2012 16V 20%
C2211	0CE225DK618	2.2UF STD 50V 20%	C665	0CK105DF64A	1UF 2012 16V 20%
C301	0CK224DF56A	220000PF 2012 16V 10%	C666	0CK105DF64A	1UF 2012 16V 20%
C303	0CK224DF56A	220000PF 2012 16V 10%	C668	0CK105DF64A	1UF 2012 16V 20%
C305	0CK224DF56A	220000PF 2012 16V 10%	C677	0CK105DF64A	1UF 2012 16V 20%
C31	0CE105DK618	1UF STD 50V M	C682	0CN475FH67A	4.7UF 3225 25V 20%
C315	0CK224DF56A	220000PF 2012 16V 10%	C683	0CN475FH67A	4.7UF 3225 25V 20%
C316	0CE107DD618	100UF STD 10V M	C684	0CN475FH67A	4.7UF 3225 25V 20%
C328	0CE106DF618	10UF STD 16V M	C711	0CE107DF618	100UF STD 16V M
C332	0CE476DF618	47UF STD 16V M	C730	0CE107DH618	100UF STD 25V M
C333	0CE107DF618	100UF STD 16V M	C777	0CE477DF618	470UF STD 16V 20%
C336	0CK224DF56A	220000PF 2012 16V 10%	C801	0CE476DK618	47UF STD 50V M
C337	0CE226DF618	22UF STD 16V M	C802	0CE477DF618	470UF STD 16V 20%
C338	0CE107DF618	100UF STD 16V M	C803	0CE477DH618	470UF STD 25V M
C341	0CK224DF56A	220000PF 2012 16V 10%	C804	0CE477DF618	470UF STD 16V 20%
C343	0CE476DF618	47UF STD 16V M	C805	0CE477DF618	470UF STD 16V 20%
C347	0CE105CK636	1UF SHL,SD 50V M	C806	0CE477DF618	470UF STD 16V 20%
C349	0CE105CK636	1UF SHL,SD 50V M	C815	0CE477DH618	470UF STD 25V M
C351	0CE105CK636	1UF SHL,SD 50V M	C819	0CE106DF618	10UF STD 16V M
C353	0CE105CK636	1UF SHL,SD 50V M	C820	0CE226DF618	22UF STD 16V M
C546	0CE107DF618	100UF STD 16V M	C822	0CE107DH618	100UF STD 25V M
C583	0CE107DF618	100UF STD 16V M	C823	0CE227DH618	220UF STD 25V M
C584	0CE107DF618	100UF STD 16V M	C825	0CE477DH618	470UF STD 25V M
C585	0CE107DF618	100UF STD 16V M	C826	0CE477DH618	470UF STD 25V M
C59	0CK105DF64A	1UF 2012 16V 20%	C831	0CE477DD618	470UF STD 10V M
C6	0CE107DF618	100UF STD 16V M	C832	0CE477DD618	470UF STD 10V M
C60	0CK105DF64A	1UF 2012 16V 20%	C834	0CE477DD618	470UF STD 10V M
C603	0CE476DF618	47UF STD 16V M	C835	0CE477DD618	470UF STD 10V M
C61	0CK105DF64A	1UF 2012 16V 20%	C836	0CE477DD618	470UF STD 10V M
C613	0CE107DF618	100UF STD 16V M	C837	0CE477DD618	470UF STD 10V M
C615	0CE107DD618	100UF STD 10V M	C839	0CE477DD618	470UF STD 10V M
C616	0CE106DF618	10UF STD 16V M	C839	0CE477DF618	470UF STD 16V 20%
C617	0CE106DF618	10UF STD 16V M	C888	0CE477DH618	470UF STD 25V M
C619	0CE335DK618	3.3UF STD 50V 20%	C888	0CE477DD618	470UF STD 10V M
C62	0CK105DF64A	1UF 2012 16V 20%	C902	0CE107DF618	100UF STD 16V M
C620	0CE477DF618	470UF STD 16V 20%	C902	0CE477DD618	470UF STD 10V M
C621	0CK224DF56A	220000PF 2012 16V 10%	C902A	0CE227DD618	220UF STD 10V M
C622	0CK224DF56A	220000PF 2012 16V 10%	C923	0CE476DF618	47UF STD 16V M
C624	0CK224DF56A	220000PF 2012 16V 10%	C924	0CE476DF618	47UF STD 16V M
C626	0CK224DF56A	220000PF 2012 16V 10%	C925	0CE476DF618	47UF STD 16V M
C627	0CK224DF56A	220000PF 2012 16V 10%	C926	0CE476DF618	47UF STD 16V M
C628	0CK224DF56A	220000PF 2012 16V 10%	C927	0CE476DF618	47UF STD 16V M
C63	0CK105DF64A	1UF 2012 16V 20%	C928	0CE476DF618	47UF STD 16V M
C630	0CE107DF618	100UF STD 16V M	C941	0CE106DK618	10UF STD 50V M

100:	B. B= · · · ·	PE005-15-1-1-1			
LOCA. NO	PART NO	DESCRIPTION			
C942	0CE107DF618	100UF STD 16V M			
C956	0CK823DK56A	82000PF 2012 50V 10%			
C962	0CE107DF618	100UF STD 16V M			
C987	0CE476DF618	47UF STD 16V M			
C988	0CE476DF618	47UF STD 16V M			
C989	0CE476DF618	47UF STD 16V M			
C991	0CK105DF64A	1UF 2012 16V 20%			
FUSE					
F801	0FS4001B84B	FUSE,SLOW BLOW 0FS 4000MA 250V			
F802	0FS4001B84B	FUSE,SLOW BLOW 0FS 4000MA 250V			
F803	0FT2001A86B	FUSE,SLOW BLOW 2000MA 125V			
F804	0FS2501B84B	FUSE,SLOW BLOW 2500MA 250V			
F804	0FT2001A86B	FUSE,SLOW BLOW 2000MA 125V			
F805	0FS2501B84B	FUSE,SLOW BLOW 2500MA 250V			
F805	0FT2001A86B	FUSE,SLOW BLOW 2000MA 125V			
1 000	01 12001A00B				
JACK					
JA204	6612VCH003B	JACK,PHONE PEJ012C			
JA205	380-336E	JACK,RCA WA6013E 1P			
JA206	380-336F	JACK,RCA WA6013E 1P			
JA2201	6613V00008F	JACK ASSY,PMJ014F E/P(ST)+SVHS+3P			
JA801	6612VAH001C	JACK,PHONE DC003 4PIN POWER			
SJ205	6612VJH008D	JACK,RCA PJ6063D DVD IN 3P			
SJ209	6613V00004P	JACK ASSY,PJ6054P 3P			
	COIL 8	L TRANSFORMER			
L101	0LA0102K139	INDUCTOR,10UH K			
L2206	0LA0472K119	INDUCTOR,47UH K			
L2207	0LA0472K119	INDUCTOR,47UH K			
L652	6140VR0008A	COIL,SLF12575T330M4R7 33UH			
L653	6140VR0008A	COIL,SLF12575T330M4R7 33UH			
L654	6140VR0008A	COIL,SLF12575T330M4R7 33UH			
L655	6140VR0008A	COIL,SLF12575T330M4R7 33UH			
	6140VR0008A	COIL,SLF12575T350M4R7 330H			
L801 L804		·			
LOU4	6140VR0008B	COIL,SLF12575T150M3R2 15UH			
	6170\/MC \ E7D				
T801	6170VMCA57B	TRANSFORMER,SMPS[COIL] EPC1716 15UH			
T801	C	TRANSFORMER,SMPS[COIL] EPC1716 15UH			
T801 JA202	6630G15E215	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM			
JA202 P2002	6630G15E215 6631V20037C	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM CONNECTOR ASSEMBLY,7P 2.0MM			
T801 JA202	6630G15E215	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM			
JA202 P2002	6630G15E215 6631V20037C	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM CONNECTOR ASSEMBLY,7P 2.0MM CONNECTOR ASSEMBLY,5P 2.5MM CONNECTOR ASSEMBLY,12P 2.0MM			
JA202 P2002 P2202	6630G15E215 6631V20037C 387-A05E	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM CONNECTOR ASSEMBLY,7P 2.0MM CONNECTOR ASSEMBLY,5P 2.5MM			
JA202 P2002 P2202 P2203	6630G15E215 6631V20037C 387-A05E 6631V20014K	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM CONNECTOR ASSEMBLY,7P 2.0MM CONNECTOR ASSEMBLY,5P 2.5MM CONNECTOR ASSEMBLY,12P 2.0MM			
JA202 P2002 P2202 P2203	6630G15E215 6631V20037C 387-A05E 6631V20014K	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM CONNECTOR ASSEMBLY,7P 2.0MM CONNECTOR ASSEMBLY,5P 2.5MM CONNECTOR ASSEMBLY,12P 2.0MM CONNECTOR ASSEMBLY,12P 2.0MM			
JA202 P2002 P2202 P2203 P2301	6630G15E215 6631V20037C 387-A05E 6631V20014K 6631V20010E	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM CONNECTOR ASSEMBLY,7P 2.0MM CONNECTOR ASSEMBLY,5P 2.5MM CONNECTOR ASSEMBLY,12P 2.0MM CONNECTOR ASSEMBLY,12P 2.0MM RESISTOR			
JA202 P2002 P2202 P2203 P2301	6630G15E215 6631V20037C 387-A05E 6631V20014K 6631V20010E	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM CONNECTOR ASSEMBLY,7P 2.0MM CONNECTOR ASSEMBLY,5P 2.5MM CONNECTOR ASSEMBLY,12P 2.0MM CONNECTOR ASSEMBLY,8P 2.0MM RESISTOR 120 OHM 1/2 W 5.00%			
JA202 P2002 P2202 P2203 P2301 R2202 R2209	6630G15E215 6631V20037C 387-A05E 6631V20014K 6631V20010E 0RD1200H609 0RD1200H609	TRANSFORMER,SMPS[COIL] EPC1716 15UH CONNECTOR CONNECTOR,DSUB 15P 2.29MM CONNECTOR ASSEMBLY,7P 2.0MM CONNECTOR ASSEMBLY,5P 2.5MM CONNECTOR ASSEMBLY,12P 2.0MM CONNECTOR ASSEMBLY,12P 2.0MM CONNECTOR ASSEMBLY,8P 2.0MM RESISTOR 120 OHM 1/2 W 5.00% 120 OHM 1/2 W 5.00%			

LOCA. NO	PART NO	DESCRIPTION		
RA404	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA405	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA406	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA407	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA451	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA452	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA453	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA454	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA502	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA511	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA512	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA525	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA525	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%		
RA526	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA526	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%		
RA701	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA702	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA703	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA704	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA705	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA706	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
RA707	0RRZVTA001A	MNR14E0AJ101 R OHM 100 OHM 5%		
		SWITCH		
SW2007	140-313B	SWITCH,TACT 2LEAD 160G(TA)		
SW2008	140-313B	SWITCH,TACT 2LEAD 160G(TA)		
SW2009	140-313B	SWITCH,TACT 2LEAD 160G(TA)		
SW2010	140-313B	SWITCH,TACT 2LEAD 160G(TA)		
SW2011	140-313B	SWITCH,TACT 2LEAD 160G(TA)		
SW2012	140-313B	SWITCH,TACT 2LEAD 160G(TA)		
SW2013	140-313B	SWITCH,TACT 2LEAD 160G(TA)		
SW2014	140-313B	SWITCH,TACT 2LEAD 160G(TA)		
SW501	6600VR1004A	SWITCH,TACT SKHMPW 5P		
SW502	6600VR1004A	SWITCH,TACT SKHMPW 5P		
	FILT	ER & CRYSTAL		
L102	6210TCE001G	FILTER,EMC HH1M3216501		
L103	6210TCE001G	FILTER,EMC HH1M3216501		
L1955	6210TCE001G	FILTER,EMC HH1M3216501		
L1956	6210TCE001G	FILTER,EMC HH1M3216501		
L1957	6210TCE001G	FILTER,EMC HH1M3216501		
L1958	6210TCE001G	FILTER,EMC HH1M3216501		
L2	6210TCE001G	FILTER,EMC HH1M3216501		
L205	6210TCE001A	FILTER,EMC HB1S2012080JT		
L206	6210TCE001A	FILTER,EMC HB1S2012080JT		
L214	6210TCE001A	FILTER,EMC HB1S2012080JT		
L215	6210TCE001A	FILTER,EMC HB1S2012080JT		
L2201	6210TCE001A	FILTER,EMC HB1S2012080JT		
L2202	6210TCE001A	FILTER,EMC HB1S2012080JT		
L2206	6210TCE001A	FILTER,EMC HB1S2012080JT		
L2207	6210TCE001A	FILTER,EMC HB1S2012080JT		

1004 NO	DARTNO	DESCRIPTION	1004 NO	DA
LOCA. NO	PART NO	DESCRIPTION	LOCA. NO	PA
L2208	6210TCE001A	FILTER,EMC HB1S2012080JT		
L3	6210TCE001G	FILTER,EMC HH1M3216501		
L301	6210TCE001G	FILTER,EMC HH1M3216501		
L302	6210TCE001A	FILTER,EMC HB1S2012080JT		
L303	6210TCE001G	FILTER,EMC HH1M3216501		
L451	6210TCE001G	FILTER,EMC HH1M3216501		
L452	6210TCE001G	FILTER,EMC HH1M3216501		
L453	6210TCE001G	FILTER,EMC HH1M3216501		
L454	6210TCE001G	FILTER,EMC HH1M3216501		
L601	6210TCE001G	FILTER,EMC HH1M3216501		
L603	6210TCE001G	FILTER,EMC HH1M3216501		
L651	6210TCE001G	FILTER,EMC HH1M3216501		
L699	6210TCE001G	FILTER,EMC HH1M3216501		
L702	6210TCE001G	FILTER,EMC HH1M3216501		
L703	6210TCE001A	FILTER,EMC HB1S2012080JT		
L732	6210TCE001G	FILTER,EMC HH1M3216501		
L808	6210TCE001G	FILTER,EMC HH1M3216501		
L809	6210TCE001G	FILTER,EMC HH1M3216501		
L810	6210TCE001G	FILTER,EMC HH1M3216501		
L901	6210TCE001G	FILTER,EMC HH1M3216501		
L951	6210TCE001G	FILTER,EMC HH1M3216501		
L952	6210TCE001G	FILTER,EMC HH1M3216501		
L953	6210TCE001G	FILTER,EMC HH1M3216501		
L954	6210TCE001A	FILTER,EMC HB1S2012080JT		
RA504	6210VC0004A	FILTER,EMC BK3216 4S600		
X1	156-A01P	RESONATOR,CRYSTAL HC49U 8.000MHZ		
X1501	6202VDT002J	RESONATOR,CRYSTAL SX1 13.500000MHZ		
X301	6202VDT002E	RESONATOR,CRYSTAL SX1SMD 20250000HZ		
X501	6202VDT002B	RESONATOR, CRYSTAL SX1 SC14.3MHZ		
X601	6202VDT002H	RESONATOR,CRYSTAL SX1 18.432000MHZ		
	MIS	CELLANEOUS		
D2301	3720V00194C	PANEL ASSY,RU15LA60		
PA2301	6726VV0006D	REMOTE CONTROLLER RECEIVER,38.0KHZ		
TU101	6700VNF019E	TUNER,TAFHH001P LG NTSC FS		
	A	CCESSORIES		
A1	3828VA0387H	MANUAL,OWNERS ML027C		
"	3828VA0387T	MANUAL,OWNERS RU-17LZ22.AAPLKZ		
A2	6710V00126J	REMOTE CONTROLLER,ML027C		
#Z	6710V001265 6710V00126E	REMOTE CONTROLLER, ML027C REMOTE CONTROLLER RU-17LZ22.AAPLKZ		
۸۵		POWER CORD,PS204001 1800MM		
A3	6410VUH003A	,		
A4	6634B00043J	ADAPTER,ACDC SAD7015SE 15V 4.5A		
A5	6851V00004D	CABLE ASSEMBLY, AUDIO TO AUDIO 2000MM		
A6	6866VA9001A	CONNECTOR,DSUB 29909C,AT,L1830		
	1		L	

LOCA. NO	PART NO	DESCRIPTION



Aug., 2003 P/NO : 3828VD0140G Printed in Korea

